

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

### **Listing Of Claims:**

1. (Original) A method for producing an integrated microsystem, the method comprising:
  - providing at least one silicon-germanium functional layer;
  - providing at least one germanium sacrificial layer, wherein the at least one germanium sacrificial layer is at least partially removed in an etching solution, and a pH value of the etching solution is stabilized around a pH value of at least approximately 7 by using a buffer; and
  - providing at least one open metal surface
2. (Original) The method of claim 1, wherein the buffer is free of at least one of alkalis, alkaline earths and metals.
3. (Original) The method of claim 1, wherein the buffer is selected so that a change in the pH value of the etching solution by etching products, which form during the etching process, is prevented by the buffer.
4. (Original) The method of claim 1, wherein the etching solution is made up at least partially of acidified hydrogen peroxide.
5. (Original) The method of claim 1, wherein the etching solution contains one of peroxosulfate, peroxodisulfate, a chlorate, a chlorite and a hypochlorite as an oxidizing agent.
6. (Original) The method of claim 1, wherein a buffer solution of the buffer contains cations of nitrogen compounds.
7. (Original) The method of claim 1, wherein the buffer contains at least one of a bicarbonate, a carbonate, a tartrate and an acetate.
8. (Original) The method of claim 1, wherein the buffer contains anions of phosphorus compounds.
9. (Original) The method of claim 1, wherein the buffer includes nitrate ions.

10. (Original) The method of claim 7, wherein the buffer is made of at least one of ammonium acetate, ammonium dihydrogenphosphate and tetramethyl ammonium dihydrogenphosphate.

11-25. (Canceled)

27. (Original) The method of claim 8, wherein the buffer contains anions of dihydrogenphosphate, hydrogenphosphate or phosphate ions.

28. (Original) The method of claim 14, wherein the metal layer includes an aluminum layer, and the diffusion barrier includes a TiN layer, which are structured using a plasma etching process.

29.-30. (Canceled)